

REMARKS

By this Amendment, claim 14 has been amended, and claims 15, 22-27 and 29 have been canceled. Thus, claims 14 and 16-21, 28, and 30-35 are pending in this application. Reexamination and reconsideration of the application are respectfully requested.

Applicant notes that the specification has been amended for clarity. No new matter has been added.

In items 3-6 on pages 3-8 of the Office Action, claims 14-20, 22-26 and 28-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bishop (WO 89/08522); and in item 7 on page 8 of the Office Action, claims 21, 27 and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bishop in view of Niwa et al. (U.S. Patent No. 4,615,091). This rejection is believed clearly inapplicable to amended independent claim 14 and claims 16-21, 28, and 30-35 depending therefrom, for the following reasons.

With exemplary reference to present drawing Figures 1-3, independent claim 14 sets forth a method for machining a scroll wrap, comprising: forming a stationary scroll 1 having an end plate 1A and a scroll wrap 1B extending from the end plate 1A thereof, the scroll wrap 1B of the stationary scroll 1 having a side face 1C, forming a slewing scroll 2 having an end plate 2A and a scroll wrap 2B extending from the end plate 2A thereof, the scroll wrap 2B of the slewing scroll 2 having a side face 2D, the side face 1C of the stationary scroll wrap 1B and the side face 2D of the slewing scroll wrap 2A are configured to slide with respect to each other in use; Hale-machining the side face 1C/2D of one of the stationary scroll wrap 1 and the slewing scroll wrap 2 by moving along a longitudinal direction of the one of the stationary scroll wrap 1B and the slewing scroll wrap 2B a non-rotational blade 9 such that machined at one time is a portion of the side face 1C/2D, of the one of the stationary scroll wrap 1B and the slewing scroll wrap 2B, extending substantially for a height of the one of the stationary scroll wrap 1B and the slewing scroll wrap 2B; and providing a cutting edge of the non-rotational blade 9 with a length greater than the height of the one of the stationary scroll wrap 1 and the slewing scroll wrap 2.

Importantly, claim 14 specifically requires Hale-machining the side face 1C/2D of one of the stationary scroll wrap 1 and the slewing scroll wrap 2 by moving along a longitudinal

direction of the one of the stationary scroll wrap 1B and the slewing scroll wrap 2B a non-rotational blade 9 such that machined at one time is a portion of the side face 1C/2D, of the one of the stationary scroll wrap 1B and the slewing scroll wrap 2B, extending substantially for a height of the one of the stationary scroll wrap 1B and the slewing scroll wrap 2B, by using a cutting edge of the non-rotational blade 9 that has a length greater than the height of the one of the stationary scroll wrap 1 and the slewing scroll wrap 2. Bishop would not have suggested this feature.

Contrary to claim 14's requirement of machining at one time a portion of a side face, of one of a stationary scroll wrap and a slewing scroll wrap, extending substantially for a height of the one of the stationary scroll wrap and the slewing scroll wrap by using a cutting edge of the non-rotational blade 9 that has a length greater than the height of the one of the stationary scroll wrap 1 and the slewing scroll wrap 2, Bishop discloses a method of machining a scroll wrap that includes cutting only a part of a side face of a wrap (i.e., less than the full height of the wrap) with a cutting edge 13, 14 of a blade 11, 12 that has a length that is less than the height of the wrap 4 (see, e.g., Figs. 5-7). In this regard, Applicant notes that the cutting edge 13, 14 is formed only on the lower end portion of the blade 11, 12. Because the cutting edge 13, 14 is formed only on the lower end portion of the blade 11, 12, the method of machining the side face of the wrap 4 requires repeating the cutting of the side face of the wrap one hundred times (see, e.g., page 5, lines 19-22, page 7, lines 3-6, and page 10, lines 18-20). For example, page 5, lines 14-20 of Bishop discloses that cutting of the wrap begins by positioning the cutting edge 13, 14 of the blade 11, 12 at the end of the wrap and cutting successively deeper until the root of the wrap is reached.

The Bishop method of cutting only a part of a side face of a wrap with a cutting edge 13, 14 of a blade 11, 12 that has a length that is less than the height of the wrap 4 is described in further detail on page 4, line 26-page 5, line 13, where the method of finish machining a surface of a wrap comprises: the steps of bringing a cutting tool into contact with a point on the surface of the wrap; traversing the tool in a direction tangential to the base circle whereby a strip of material is removed from the wrap over its full length; removing the tool axially from the wrap

and bringing it into contact therewith at a point adjacent the first mentioned starting point and repeating the traversing step. Clearly, the Bishop method fails to disclose machining at one time a portion of a side face, of one of a stationary scroll wrap and a slewing scroll wrap, extending substantially for a height of the one of the stationary scroll wrap and the slewing scroll wrap by using a cutting edge of the non-rotational blade that has a length greater than the height of the one of the stationary scroll wrap and the slewing scroll wrap.

For at least the foregoing reasons, Applicant submits that Bishop would not have suggested all of the features as required in independent claim 14. Further, claims 16-20, 28, and 30-34 also would not have been suggested by Bishop by virtue of their dependencies from claim 14.

In addition, the Examiner cited the Niwa et al. reference for disclosing the surface roughness as required in claims 21, 27 and 35. However, the Niwa et al. reference provides no teaching or suggestion that would have obviated the above-discussed shortcomings of the Bishop reference with respect to claim 14. Thus, claims 21, 27 and 35 also would not have been suggested by the combination of Bishop and Niwa et al. by virtue of their dependencies from claim 14.

In view of the foregoing, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.

If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is invited to contact the Applicant's undersigned representative at the telephone number listed below.

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